

BIBLIOGRAPHY

C. FITZHUGH TALMAN, Meteorologist in Charge of Library

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

RECENT ADDITIONS

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RECENT PAPERS BEARING ON METEOROLOGY

The following titles have been selected from the contents of the periodicals and serials recently received in the library of the Weather Bureau. The titles selected are of papers and other communications bearing on meteorology and cognate branches of science. This is not a complete index of all the journals from which it has been compiled. It shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau.

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SOLAR OBSERVATIONS

SOLAR AND SKY RADIATION MEASUREMENTS DURING DECEMBER, 1924

By HERBERT H. KIMBALL, In Charge, Solar Radiation Investigations

For a description of instruments and exposures and an account of the method of obtaining and reducing the measurements, the reader is referred to the REVIEW for January and February, 1924, 52:42 & 113.

From Table 1 it is seen that solar radiation intensities averaged close to normal values at all three stations.

Table 2 shows that the total solar and sky radiation received on a horizontal surface averaged below normal at the three stations for which normals have been computed. For the year, Washington received an average amount of radiation, Madison 6 per cent less than the average, and Lincoln 1 1/4 per cent more than the average.

Skylight polarization measurements made on four days at Washington give a mean of 55 per cent with a maximum of 56 per cent on the 2d. These are below the corresponding averages for December at Washington. At Madison a measurement of 67 per cent on the 13th, with patches of snow on the ground, was below the average value for December at that station. After that date the ground was covered with snow.

TABLE 1.—Solar radiation intensities during December, 1924

[Gram-calories per minute per square centimeter of normal surface]

Washington, D. C.

Date	Sun's zenith distance										Local mean solar time
	8 a.m.								Noon		
	75°	75.7°	70.7°	60.0°	0.0°	60.0°	70.7°	75.7°	78.7°		
Date	Air mass								A. M.		
	75th mer. time								A. M.	P. M.	e.
	e.	5.0	4.0	3.0	2.0	*1.0	2.0	3.0	4.0	5.0	e.
	mm.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	mm.	
Dec. 2	2.16	0.62	0.76	0.92	1.12	-----	-----	0.91	0.77	0.66	2.36
9	4.75	0.85	0.96	1.17	1.31	-----	-----	1.20	1.07	0.95	3.81
12	3.81	0.64	0.78	1.00	1.26	-----	-----	1.05	-----	-----	4.17
13	5.56	-----	-----	-----	1.01	-----	-----	-----	-----	-----	5.17
19	7.57	-----	-----	1.26	1.31	-----	-----	0.81	-----	-----	8.81
26	1.19	1.06	1.20	1.35	1.49	1.13	1.09	0.88	0.83	1.45	
Means		0.70	0.89	1.10	1.19	1.02	0.94	0.83	0.83	0.83	
Departures		-0.08	+0.00	+0.05	-0.03	+0.01	+0.05	+0.05	+0.05	+0.05	
	Madison, Wis.										
Dec. 1	1.78	-----	-----	-----	-----	-----	1.01	-----	-----	1.88	
2	2.06	0.88	-----	-----	-----	-----	-----	0.77	-----	3.45	
10	1.07	1.00	1.17	-----	-----	-----	-----	-----	-----	1.52	
13	3.45	1.04	1.32	-----	-----	-----	-----	-----	-----	1.96	
19	0.86	-----	-----	-----	-----	-----	1.20	-----	-----	0.51	
20	0.43	1.19	1.29	-----	-----	-----	-----	-----	-----	0.56	
22	0.79	0.97	1.15	-----	-----	-----	-----	-----	-----	1.02	
24	0.58	-----	1.34	-----	-----	-----	-----	-----	-----	0.48	
Means	(1.04)	1.01	1.25	-----	-----	-----	(1.15)	-----	-----		
Departures	+0.06	-0.09	+0.02	-----	-----	-----	-0.14	-----	-----		

* Extrapolated.